Application Serial No: 10/577,578
In response to the Office Action mailed on: June 16, 2009

REMARKS

This Amendment is in response to the Office Action mailed on June 16, 2009. Claims 1-11 are amended. The amendments to claim 1 are supported, for example, in the specification on page 13, lines 23-27. Claims 2-5 are amended to track the amendments to claim 1. Claims 1, 2 and 4 are also amended to make minor editorial revisions. Claims 6-11 are amended to make minor editorial revisions. No new matter is added. Claims 1-11 are pending.

§103 Rejections:

Claims 1-11 are rejected as being unpatentable over Nankai (JP 8-10208) in view of Burke (US Patent No. 7,338,639). This rejection is traversed.

Claim 1 is directed to a sample analysis method that recites, among other features, a first step that comprises grasping a level of the output from the double integration circuit repetitively at a first sampling time interval defined by a time period from start of the inputting into the double integration circuit until completion of the outputting from the double integration circuit. Claim 1 further recites a second step that comprises grasping a level of the output from the double integration circuit at a second sampling time interval defined by a time period from start of the inputting into the double integration circuit until completion of the outputting from the double integration circuit, the second sampling time interval being set longer than the first sampling time interval.

The combination of Nankai and Burke does not teach or suggest these features. Nankai merely teaches a basic circuit structure of a sample analysis apparatus and does not teach or suggest a sampling time interval before and after confirmation of a sample supply. Also, nowhere does Nankai teach or suggest the use of a double integration circuit (see Figures 11A and 11B of Nankai and the corresponding US Patent of Nankai, US Patent No. 5,320,732). Thus, Nankai does not teach or suggest the above features of claim 1.

Burke does not overcome these deficiencies of Nankai. The rejection relies on column 6, line 39-column 8, line 9 of Burke for teaching first and second time intervals. However, Burke merely teaches that an excitation frequency is stepped down in four stages throughout AC measurement while a sampling interval/frequency is fixed at 10

pts/cycle, and during DC excitation, measurements are made at a fixed rate of 100 pts/sec. Thus, the "excitation frequency" of Burke is a frequency at which the actuation voltage or current fluctuates for actuating the test electrodes 6a, 6b fluctuates. (see column 6, line 38-column 8, line 18 and Figure 3B of Burke).

In contrast, claim 1 recites a first sampling time interval defined by a time period from start of the inputting into the double integration circuit until completion of the outputting from the double integration circuit and a second sampling time interval defined by a time period from start of the inputting into the double integration circuit until completion of the outputting from the double integration circuit. Claim 1 further recites that the second sampling time interval is set longer than the first sampling time interval. Thus, the excitation frequency of Burke cannot be interpreted as the first and second time intervals of claim 1.

Accordingly, nowhere does Burke teach or suggest a first step that comprises grasping a level of the output from the double integration circuit repetitively at a first sampling time interval defined by a time period from start of the inputting into the double integration circuit until completion of the outputting from the double integration circuit. Burke also does not teach or suggest a second step that comprises grasping a level of the output from the double integration circuit at a second sampling time interval defined by a time period from start of the inputting into the double integration circuit until completion of the outputting from the double integration circuit, the second sampling time interval being set longer than the first sampling time interval.

For at least these reasons claim 1 is not suggested by the combination of Nankai and Burke and should be allowed. Claims 2-8 depend from claim 1 and should be allowed for at least the same reasons.

Claim 9 is directed to a sample analysis apparatus that recites, among other features, a controller that performs control so that a time interval from start of the inputting into the double integration circuit until start of the outputting from the double integration circuit becomes longer after the supply of the sample to the analytical tool is confirmed than before the supply of the sample to the analytical tool is confirmed.

The combination of Nankai and Burke does not teach or suggest these features. Nankai merely teaches a basic circuit structure of a sample analysis apparatus and does

not teach or suggest a sampling time interval before and after confirmation of a sample supply. Also, nowhere does Nankai teach or suggest the use of a double integration circuit (see Figures 11A and 11B of Nankai and the corresponding US Patent of Nankai, US Patent No. 5,320,732). Thus, Nankai does not teach or suggest the above features of claim 9.

Burke does not overcome these deficiencies of Nankai. The rejection relies on column 6, line 39-column 8, line 9 of Burke for the above features of claim 9. However, Burke merely teaches that an excitation frequency is stepped down in four stages throughout AC measurement while a sampling interval/frequency is fixed at 10 pts/cycle, and during DC excitation, measurements are made at a fixed rate of 100 pts/sec. Thus, the "excitation frequency" of Burke is a frequency at which the actuation voltage or current fluctuates for actuating the test electrodes 6a, 6b fluctuates. (see column 6, line 38-column 8, line 18 and Figure 3B of Burke).

In contrast, claim 9 recites a controller that performs control so that a time interval from start of the inputting into the double integration circuit until start of the outputting from the double integration circuit becomes longer after the supply of the sample to the analytical tool is confirmed than before the supply of the sample to the analytical tool is confirmed. Thus, the excitation frequency of Burke cannot be interpreted as the time intervals of claim 9.

Accordingly, nowhere does Burke teach or suggest a controller that performs control so that a time interval from start of the inputting into the double integration circuit until start of the outputting from the double integration circuit becomes longer after the supply of the sample to the analytical tool is confirmed than before the supply of the sample to the analytical tool is confirmed, as recited in claim 9.

For at least these reasons claim 9 is not suggested by the combination of Nankai and Burke and should be allowed. Claims 10 and 11 depend from claim 9 and should be allowed for at least the same reasons.

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Conclusion:

Applicants respectfully assert that claims 1-11 are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.

Respectfully submitted,

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